IN THE CLAIMS:

Claim 1 (currently amended): Ball A ball bearing for use in medical and dental applications with comprising:

an inner race and an outer race coaxial <u>with the inner, said outer race having a</u>

<u>bottom surface on which is provided a groove for accommodating a retaining ring and a</u>

<u>cover disk, said retaining ring having an inner side and an outer side with respect to it, and</u>

said cover disk being positioned adjacent said inner side of said retaining ring;

bearing balls disposed between said inner race and said outer race; and

a cage comprising a composite material of heat cured epoxide resin as well as fibers

which form a fibrous web;

wherein between inner race and outer race said bearing balls are disposed, which are guided by means of a said cage, wherein the cage is comprised of a composite material, characterized in that the composite material comprises epoxide resin as well as fibers. and wherein one of said inner race and said outer races rotates at a rate of about 500,000 rotations per minute, and wherein said ball bearing has an outer diameter of 30mm or less.

Claim 2 (currently amended): Ball A ball bearing as claimed in claim 1, characterized in that wherein the epoxide resin is temperature resistant at a temperature higher than 130°C, in particular at temperatures higher than or equal to 134°C, and/or that the epoxide resin and is pressure resistant, in particular at pressures about or above 1 bar, and/or that and wherein the epoxide resin is moisture resistant, in particular is resistant under a saturated vapor atmosphere.

Claim 3 (currently amended): Ball A ball bearing as claimed in claim 1,1,characterized in that wherein the composite material is entirely comprised of epoxide resin as well as fibers.

Claim 4 (currently amended): Ball A ball bearing as claimed in claim 1,1, characterized in that wherein the fibers are natural fibers and/or synthetic fibers.

Claim 5 (currently amended): Ball A ball bearing as claimed in claim 1, characterized in that wherein the fibers are developed as a carrier material, in particular a strip-shaped carrier material, for the epoxide resin.

Claim 6 (currently amended): Ball A ball bearing as claimed in claim 5, characterized in that wherein the carrier material is implemented as a structured fabric, in particular cloth.

Claim 7 (currently amended): Ball A ball bearing as claimed in claim 6, characterized in that wherein the carrier material is developed as a fibrous web.

Claim 8 (currently amended): Ball A ball bearing as claimed in claim 1, characterized in that wherein the cage (3), in particular the fibers, is filled with lubricant.

Claim 9 (canceled).

Claim 10 (new): A ball bearing as claimed in claim 1, wherein said ball bearing has an outer diameter is between 6mm and 12mm.